Abstract

We consider a two-period model of a banking system to explore the effects of competition on economic stability.

In the model, after entrepreneurs have received loans for their projects, there is a probability of a shock. The shock means that some firms will be unable to pay back their loans, and in turn banks will have to use their capital and reserves to pay back depositors. This will restrict second period lending, thus amplifiyng the effect of the initial shock. There are two possible types of equilibria, a prudent one where banks do not collapse after the shock, and an imprudent equilibrium where banks collapse in the event of a shock. We examine the effects of increased competition in the model.

First, we find existence conditions for a prudent equilibria, i.e., with no banking collapse. Second, we show that the effect of banking competition is to increase the efficienciy of the economy at the expense of increased variance in economic results. Unpredicted capital adequacy loosening after a shock can be used to reduce this variance, but the effect of expected loosening of capital adequacy rules in response to a shock is ambiguous. We also show the expected result that as the size of a shock increases, there is less lending in a prudent equilibrium (and has no effect in an imprudent equilibrium). Finally we show that independently of the type of equilibria or the possibility of a switch among types of equilibria, increased bankinfg competition increases the amplification effect after a shock.